

DERWENT- 2002-464594  
ACC-NO:

DERWENT- 200352  
WEEK:

*COPYRIGHT 2006 DERWENT INFORMATION LTD*

**TITLE:** Safety device for pedestrians has on A-column(s) of vehicle, guide device for gas bag provided with which gas bag is coupled, guide device being linear

**INVENTOR:** MIODEK, T

**PATENT-ASSIGNEE:** TRW OCCUPANT RESTRAINT SYSTEMS GMBH[THOP]

**PRIORITY-DATA:** 2001DE-2019579 (December 3, 2001)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2003182485 A	July 3, 2003	N/A	004	B60R 021/00
DE 20119579 U1	May 29, 2002	N/A	010	B60R 021/34
DE 10254936 A1	June 12, 2003	N/A	000	B60R 021/34
FR 2832966 A1	June 6, 2003	N/A	000	B60R 021/34

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2003182485A	N/A	2002JP-0350714	December 3, 2002
DE 20119579U1	N/A	2001DE-2019579	December 3, 2001
DE 10254936A1	N/A	2002DE-1054936	November 25, 2002
FR 2832966A1	N/A	2002FR-0014955	November 28, 2002

**INT-CL (IPC):** B60R021/00, B60R021/34

**ABSTRACTED-PUB-NO:** DE 20119579U

**BASIC-ABSTRACT:**

NOVELTY - A safety device for pedestrians has a gas bag (7) which in the inflated state at least partly covers the windshield (1) on the outside of a vehicle equipped with the safety device.

DETAILED DESCRIPTION - On at least one A-column (5) of the vehicle, a guide device (13) for the gas bag is provided with which the gas bag is coupled. The guide device is a linear guide along which the lashing of the gas bag to the guide device slides upon unfolding. The gas bag and the guide device are designed so that the gas bag upon inflation slides with its lashing to the guide device along the same.

USE - For decreasing impact on pedestrians.

ADVANTAGE - Exactly definable and reproducible position of the gas bag on the windshield.

DESCRIPTION OF DRAWING(S) - The drawing shows the gas bag inflated.

windshield 1

A-column 5

gas bag 7

guide device 13

**CHOSEN-** Dwg.1/4  
**DRAWING:**

**TITLE-** SAFETY DEVICE PEDESTRIAN COLUMN VEHICLE GUIDE DEVICE GAS  
**TERMS:** BAG GAS BAG COUPLE GUIDE DEVICE LINEAR

**DERWENT-CLASS:** Q17 X22

**EPI-CODES:** X22-J11B;

**SECONDARY-ACC-NO:**

**Non-CPI Secondary Accession Numbers:** N2002-366180

\* NOTICES \*

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

DETAILED DESCRIPTION

---

[Detailed Description of the Invention]

[0001] About the safety device for pedestrians with which this invention was equipped with the gas bag, this gas bag sets the outside of the windshield of the car possessing this safety device in the expansion condition, and is a wrap selectively at least.

[0002] Such a gas bag is well-known from the German patent disclosure official report No. 2711338 or the German patent disclosure official report No. 19745873. A gas bag will usually appear from between the trailing edge of an engine bonnet, and the margin inferior of a windshield here, if it is contained by the field of the container of windshield wash water under the trailing edge of an engine bonnet and a pedestrian or other road users collide with a car.

[0003] This invention forms the guide apparatus of a gas bag in at least one A column of a car, and offers a still better safety device by connecting a gas bag with this guide apparatus. Positioning possible [ setting out to the accuracy of the gas bag to a windshield ] and reproducible [ with a guide apparatus ] is attained. Even if a pedestrian contacts a gas bag, it cannot be moved any longer or a gas bag will only be moved slightly.

[0004] It is a straight-line-like guide (runner track), for example, a kind of transit orbit, preferably, namely, guide apparatus are for example, an advice orbit and equipment which can be held easily. Preferably, a gas bag and a guide apparatus are constituted so that a gas bag may move the connection of a gas bag and a guide apparatus along with a guide apparatus at the time of the expansion, namely, so that a gas bag may move by the approach guided by the guide apparatus by itself as a whole. Other possibility is forming the active driving gear for the gas bag to which a gas bag's is moved along with a guide apparatus.

[0005] The connection element has been arranged on a gas bag, this connection element was concluded so that conversion might become free in a guide apparatus, and forming a connection with the guide apparatus of a gas bag with this connection element was considered. In order that this connection element can be formed with the tab of a gas bag or may save a tooth space, it may be a band or a cable. A connection element is connected with the sliding block which can change the inside of a guide apparatus freely here. When the last location is reached, it is made for the clear conversion beyond it of a gas bag not to arise with the locking device for the last location of the gas bag which expanded.

[0006] A locking device is hung, you may be a stop device, a connection with the guide apparatus of a gas bag advances into this credit stop device, and this credit stop device prevents that a connection is put back.

[0007] Preferably, a guide apparatus is formed not only A column top of one but on both A columns. According to the gestalt of desirable operation, at the time of the expansion, a gas bag jumps out of between an engine bonnet and the margin inferior of a windshield, and moves up along with a windshield.

[0008] an operator's field of view is not superfluously restricted at the time of expansion of a gas bag -- as -- moreover -- nevertheless, A column which the gas bag which expanded has the configuration of U typeface, and was related in order to actually protect the field of A column fully -- it has the upward foot

of two wraps for a lower part part at least, respectively, and has a wrap medium web for the field of the margo inferior of a windshield.

[0009] Other descriptions and advantages of this invention will become clear from the drawing of the attachment referred to from the following explanation. A car is illustrated by drawing 1 and the safety device for a pedestrian or other road users possesses on this car. A car has a windshield 1, an engine bonnet 3, and two near A columns 5 of a windshield 1.

[0010] A safety device is equipped with the gas bag 7, and this gas bag has the configuration of U typeface in an expansion condition, and has the upward foot 9 of two wraps for the lower part field of the A column 5 related, respectively. A foot 9 is interconnected, and if the medium webs 11 swollen similarly are a bonnet and the need about the field of the margo inferior 23 of a windshield 1, they can pull up the trailing edge 21 of an engine bonnet 3 a little.

[0011] The gas bag 7 is contained by the field of the container of windshield wash water of the lower part of an engine bonnet 3 in the condition of not expanding. Shortly after a pedestrian or other road users are detected and the collision with this person is predicted by the control device, the gas bag 7 will be blown up, will appear from between the trailing edge 21 of an engine bonnet 3, and the margo inferior 23 of a windshield 1, and will serve as a wrap location in the upper part of a windshield 1 and the A column 5 selectively.

[0012] As for a safety device, one guide apparatus for the gas bag 7 is further provided on A columns each so that it may move into the last location shown in drawing 1 by the approach by which the gas bag 7 was set up. For this reason, one straight-line-like guide which took the form of a transit orbit, respectively extends along with the A column 5, and in this transit orbit, a kind of sliding block 15 is contained by the longitudinal direction free [ conversion ], and, as for this sliding block, takes the form of a ball or a sliding bolt. The sliding block 15 is formed in the up free end of each foot 9, and this sliding block is connected with the gas bag 7 through the connection element, for example, a band, or the cable 17. 19 shows the concluding point over a band or the gas bag 7 of a cable 17. The sliding block 15 forms the connection of the gas bag 7 and each guide apparatus 13.

[0013] The locking device 18 which hung on the upper bed of each guide apparatus 13, and was made into the configuration of a stop device is formed. A locking device 18 consists of the maintenance flap 20, and although it permits that this maintenance flap advances into the closeout room 22 of the upper part [ block / 15 / sliding ], it prevents going away down from \*\* 22.

[0014] The gas bag 7 makes the upper part carry out press migration of two advice blocks 15 along with a guide apparatus 13 automatically at the time of the expansion. Therefore, the migration which met expansion and the windshield of a gas bag can be presetted appropriately again, and can be reproduced. The last location of the blasting-fumes bag with which the sliding block 15 passed the locking device 18 is reached, and even if, as for a gas bag, a pedestrian collides in this location, it hardly moves further.

[0015] Immobilization and positioning of a gas bag in the last location of a gas bag, i.e., the up field of a guide apparatus 13, can be optimized with the die length of a connection element 17. Moreover, direct continuation of the sliding block 15 can also be carried out to the gas bag 7.

[0016] A cable is connected with the sliding block 15, positive positioning can be performed and, thereby, the gas bag 7 can also be made to reach the last location more nearly promptly by pulling this cable up with a pyrotechnic (pyrotechnic) drive in alternative.

[0017] A straight-line-like guide must not necessarily be prepared in the outside of A column so that it may illustrate to drawing 3 . A straight-line-like guide can also be prepared in the common-law marriage of the A column 5 facing a windshield 1. Therefore, it is not necessary to prepare additional covering for a guide apparatus 13, and additional covering is not further illustrated to drawing 3 for easy-izing of an understanding.

---

[Translation done.]